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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,619	02/21/2002	Norikiyo Shibata	P/3541-19	4456
2352	7590	06/17/2004	EXAMINER	
OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			PRASAD, CHANDRIKA	
			ART UNIT	PAPER NUMBER
			2839	

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/082,619

Applicant(s)

SHIBATA ET AL.

Examiner

Chandrika Prasad

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/21/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

2. The following is a quotation of an appropriate paragraph of 37 CFR 1.75:

(d) The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. (See 1.58(a)).

3. Specification is objected under 37 C.F.R. 1.75(d) because height of the annular wall higher than the projection (claim 4) has not been described in the specification.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Schwarz et al. (6402553).

Schwarz (Figures 1-3) discloses a medical instrument (not shown) provided with a plug having a plurality of electrode elements 13, each with an exposed portion

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surrounded by an annular wall of a housing 15 and the electrodes 13 electrically connectable to a plurality of electrode elements 27 of a socket 3 formed in socket 1.

The socket has an annular wall formed by socket 1. A cable connected to the socket to supply power to the plug is inherent. The plug has another electrical contact 21 with a bump 43, which engages a plate-like electrical contact 35 provided in a slit in a socket 3 of socket 1.

6. Claims 27-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Stoll et al. (4960393).

Stoll (Figures 1-9) shows a connector having a projection 21 in a central area of a plug, an annular wall spaced a distance from the projection and a plurality of electrical contacts 34 positioned in longitudinal grooves on a peripheral surface of the projection and arranged parallel to a longitudinal axis of the connector. The width of groove is greater than the width of the contacts but smaller than a diameter of the projection. The contacts are separated by more than a width of the contacts.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3-7, 12-17 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarz (6402553) in view of Stoll et al. (4960393).

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Schwarz shows all the features of these claims except electrodes disposed in circumferential grooves on a peripheral surface of a projection, height of the annular wall higher than of the projection from the bottom of the grooves and electrodes to be plate-like. These features are well known in the art of electrical connectors. Stoll shows these features. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to provide such a feature to Schwarz's plug because this would provide a more compact plug, the wall to protect the electrodes and plate-like electrode to provide spring contact as taught by Stoll

9. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarz (6402553) in view of Nierlich et al. (5660567).

Schwarz shows all the features of these claims except the use of a resistor for detection/indication purposes. Such a feature is well known in the art of electrical connectors. Nierlich shows such a feature. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to provide such a feature to Schwarz's plug because this would provide a means to identify the type of the connector, hence the type of medical instrument being used.

10. Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarz (6402553) as modified by Stoll et al. (4960393) and further in view of Nierlich et al. (5660567).

Schwarz and Stoll show all the features of these claims except the use of a resistor for detection/indication purposes. Such a feature is well known in the art of electrical connectors. Nierlich shows such a feature. It would have been obvious to

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one having ordinary skill in the art at the time of the instant invention to provide such a feature to Schwarz's plug because this would provide a means to identify the type of the connector, hence the type of medical instrument being used.

11. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarz (6402553).

Schwarz shows all the features of these claims except the use stop guide and latching mechanism. These features are well known in the art of electrical connectors. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to provide these features because this would provide a means to guide and latch the plug and the socket together.

12. Claims 33-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarz (6402553) in view of Hood et al (5324297).

Schwarz shows all the features of these claims except a transducer, a latching mechanism and a water-proof packing. These features are well known in the art of medical devices and electrical connectors. Hood discloses an ultrasonic transducer 26 in a handpiece of a medical instrument. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to provide a transducer in the Schwarz's plug because this would provide a means to convert a drive current to ultrasonic vibrations as taught by Hood.

As to the latching and water-proof packing are concerned, these features are common knowledge and well known in the art of electrical connectors. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to

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provide these features in the Schwarz's plug and socket because this would provide a means to latch the plug and socket together and prevent entry of water into the instrument, which are known in the art.

***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wright (6083030), Nakada et al. (5301061) and Esh (6022237).

***Contact Information***

14. Any correspondence to this action may be mailed to:

**Commissioner for Patents  
Post Office Box 1450  
Alexandria, VA 22313-1450**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrika Prasad whose telephone number is (571) 272-2099.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor can be reached at (571) 272-2800 ext 39. The fax number is (703) 872-9306.



Chandrika Prasad  
Primary examiner  
June 10, 2004